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Pumice and Pumicite

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This publication is a chapter from the current Bureau of Mines Minerals Yearbook, comprising *Volume I, Metals and Minerals; Volume II, Area Reports: Domestic; Volume III, Area Reports: International.* The separate volumes of the Yearbook are sold by the Superintendent of Documents, Washington, D.C. 20402.

Pumice and Pumicite

By A. C. Meisinger[1]

Production of pumice and pumicite by 21 domestic producers in 1985 was 508,000 short tons valued at $4.6 million compared with 502,000 tons valued at $4.9 million in 1984. U.S. apparent consumption declined 6% to 749,000 tons, primarily because of a 17% decrease in imported pumice. Greece continued to be the major source of pumice imports with 98%. Estimated world production declined slightly to 12.1 million tons.

Domestic Data Coverage.—Domestic production data for pumice and pumicite are developed by the Bureau of Mines from one voluntary survey of U.S. operations. Of the 22 operations to which a survey request was sent, 18, or 82%, responded, representing 97% of total production data shown in table 1. Production for the four nonrespondents was estimated using reported prior year production levels adjusted by trends in employment and other guidelines.

Table 1.—Salient pumice and pumicite statistics

(Thousand short tons and thousand dollars unless otherwise specified)

	1981	1982	1983	1984	1985
United States: Sold and used by producers:					
Pumice and pumicite	490	416	449	502	508
Value (f.o.b. mine and/or mill)	$4,311	$3,750	$4,486	$4,929	$4,553
Average value per ton	$8.64	$9.01	$9.99	$9.82	$8.96
Exports[e]	1	1	1	1	1
Imports for consumption	92	121	184	293	242
Apparent consumption[1]	580	536	632	794	749
World: Production, pumice and related volcanic materials	[r]13,604	[r]13,446	11,966	[p]12,662	[e]12,110

[e]Estimated. [p]Preliminary. [r]Revised.
[1]Production plus imports, minus exports, plus adjustments for Government and industry stock changes.

DOMESTIC PRODUCTION

Production of pumice and pumicite by domestic producers increased slightly to 508,000 tons, but decreased 8% in value to $4.6 million compared with 1984 output. Twenty-two mines and/or plants were operated by 21 companies in 8 States, with California, Idaho, New Mexico, and Oregon accounting for 96% of U.S. production.

Principal domestic producers were American Pumice Products Inc., Littlelake, CA; Tionesta Aggregates Co., Tulelake, CA; Amcor Inc., Idaho Falls, ID; Hess Pumice Products, Malad City, ID; Producers Pumice Inc., Boise, ID; Copar Pumice Co. Inc., Santa Fe, NM; General Pumice Co., Santa Fe, NM; Utility Block Co., Albuquerque, NM; Cascade Pumice Co., Bend, OR; and Central Oregon Pumice Co., Bend, OR. Together, these 10 companies accounted for 92% of the tonnage and 68% of the value of total

U.S. production of pumice and pumicite.

Hess Pumice Products announced the relocation of the company's milling operations and construction of a new mill in the Malad City Industrial Park during the year. Construction was expected to be completed in early 1986 and will be financed by industrial revenue bonds. The company's pumice mine is about twenty miles northwest of Malad City, ID.

Table 2.—Pumice and pumicite sold and used by producers in the United States, by State

(Thousand short tons and thousand dollars)

State	1984		1985	
	Quantity	Value	Quantity	Value
Arizona	2	21	W	2
California	80	1,600	78	1,491
New Mexico	132	1,269	152	1,114
Other[1]	288	2,039	279	1,947
Total[2]	502	4,929	508	4,553

W Withheld to avoid disclosing company proprietary data; included with "Other."
[1]Includes Hawaii, Idaho, Kansas, Oklahoma, Oregon, and data indicated by symbol W.
[2]Data may not add to totals shown because of independent rounding.

CONSUMPTION AND USES

U.S. apparent consumption decreased 6% to 749,000 tons, owing, in large part, to a 17% decline in pumice imports compared with that of 1984. Principal uses of domestically produced pumice and pumicite increased 12% for abrasives and 20% for landscaping, but declined slightly for both concrete admixture and aggregate and decorative building block. Other uses of pumice increased 110%, primarily owing to increased use in road construction and maintenance during the year.

Table 3.—Pumice and pumicite sold and used by producers in the United States, by use

(Thousand short tons and thousand dollars)

Use	1984		1985	
	Quantity	Value	Quantity	Value
Abrasives (includes cleaning and scouring compounds)	25	810	28	497
Concrete admixture and aggregate	169	876	158	818
Decorative building block	272	2,801	260	2,400
Landscaping	15	129	18	133
Other[1]	21	313	44	705
Total	502	4,929	508	4,553

[1]Includes heat-or-cold insulating medium, pesticide carriers, road construction material, roofing granules, and miscellaneous uses.

PRICES

The average value, f.o.b. mine or mill, for domestic pumice and pumicite sold and used was $8.96 per ton, a 9% decrease from that of 1984, and the second straight year of decline.

Prices quoted in Chemical Marketing Reporter for domestic grades of pumice bagged in 1-ton lots were, at yearend, $270 per ton for fine and $300 per ton for medium, coarse, and 2-extra coarse. Yearend quoted prices on imported (Italian) pumice, f.o.b. east coast, bagged in 1-ton lots, were $280 per ton for fine, $350 per ton for medium, and $300 per ton for coarse.

The average declared customs value of pumice imported from Greece for use in concrete masonry products decreased from $6.82 to $6.47 per ton.

FOREIGN TRADE

Pumice imported for consumption declined 17% to 242,000 tons. Greece was the principal source with a total of 237,600 tons, of which 237,535 tons was used to produce concrete masonry products.

Table 4.—U.S. imports for consumption of pumice, by class and country

Country	Crude or unmanufactured		Wholly or partly manufactured		For use in the manufacture of concrete masonry products		Manufactured, n.s.p.f.
	Quantity (short tons)	Value (thousands)	Quantity (short tons)	Value (thousands)	Quantity (short tons)	Value (thousands)	Value (thousands)
1984:							
Greece	5,167	$75	--	--	275,756	$1,880	--
Iceland	8,228	153	--	--	--	--	--
Italy	3,297	156	172	$36	--	--	$23
Mexico	--	--	--	--	72	2	1
Other[1]	11	18	20	12	3	3	124
Total	16,703	402	192	48	275,831	1,885	148
1985:							
Greece	24	10	41	15	237,535	1,537	30
Iceland	498	92	--	--	--	--	--
India	--	--	--	--	2,176	2	--
Italy	120	42	294	79	1,051	7	44
Mexico	90	32	--	--	--	--	--
Other[2]	49	22	22	9	1	1	144
Total	781	198	357	103	240,763	1,547	218

[1]Includes Austria, Canada, China, Denmark, France, the Federal Republic of Germany, Hong Kong, Japan, Nigeria, Spain, Switzerland, Taiwan, and the United Kingdom.
[2]Includes Austria, Canada, Denmark, Ecuador, France, the Federal Republic of Germany, Japan, Spain, Switzerland, Taiwan, and the United Kingdom.

Source: Bureau of the Census.

WORLD REVIEW

World production of pumice and related volcanic materials declined 4% to an estimated 12.1 million tons. The combined output of Greece and Italy accounted for 65% of the world's total production. Of the remaining 35%, France, Spain, the United States, and Yugoslavia accounted for 63%.

[1]Industry economist, Division of Industrial Minerals.

Table 5.—Pumice and related volcanic materials: World production, by country[1]

(Thousand short tons)

Country[2]	1981	1982	1983	1984[p]	1985[e]
Argentina[3]	56	59	76	60	62
Austria: Trass	9	12	3	11	7
Cameroon: Pozzolan	58	89	NA	NA	NA
Cape Verde Islands: Pozzolan[e]	11	11	11	11	11
Chile: Pozzolan	306	190	192	190	188
Costa Rica[e]	1	2	2	2	2
Dominica: Pumice and volcanic ash[e]	120	120	120	120	120
France: Pozzolan and lapilli	518	790	669	r e550	610
Germany, Federal Republic of:					
Pumice (marketable)	r882	r441	441	717	660
Pozzolan[e]	220	220	NA	NA	NA
Greece:					
Pumice	r802	707	552	601	695
Pozzolan	r1,312	r1,297	1,004	1,001	1,005
Guadeloupe: Pozzolan[e]	265	265	265	265	265
Guatemala:					
Pumice[e]	17	13	e17	r15	15
Volcanic ash	6	e4	(5)	(5)	(5)
Iceland	37	r21	50	r e60	65
Italy:[e]					
Pumice and pumiceous lapilli	e671	825	770	720	660
Pozzolan	e6,073	6,100	5,500	6,100	5,500
Martinique: Pumice[e]	e172	170	165	165	165
New Zealand	37	55	19	17	22
Spain[6]	1,034	1,070	1,105	915	990
United States (sold and used by producers)	499	416	449	502	e508
Yugoslavia: Volcanic tuff	588	569	556	r e550	560
Total	r13,694	r13,446	11,966	12,662	12,110

[e]Estimated. [p]Preliminary. [r]Revised. NA Not available.

[1]Table includes data available through May 20, 1986.

[2]Pumice and related volcanic materials are also produced in a number of other countries, including (but not limited to) Ethiopia, Iran, Japan, Mexico, Turkey, and the U.S.S.R., but output is not reported quantitatively, and available information is inadequate for the formulation of reliable estimates of output levels.

[3]Unspecified volcanic materials produced mainly for use in construction products.

[4]Reported figure.

[5]Less than 1/2 unit.

[6]Includes Canary Islands.

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